ROTHAMSTED EXPERIMENTAL STATION

(LAWES AGRICULTURAL TRUST)

Director: Sir WILLIAM G. OGG

Head of Department of Plant Pathology F. C. BAWDEN, M.A., F.R.S. Please Quote
Our Reference
FCB/PATH

HARPENDEN HERTS.

21st October, 1957.

Dear Rosalind,

Very many thanks for your letter and the curves showing the radial density distribution of the two forms of the cowpea strain of tobacco mosaic virus. I was interested that you find the differences to be of the same magnitude as those between TMV and and CV4 because this is the kind of magnitude I have said there is between the two from serological behaviour. Unfortunatly I have no CV4 or antiserum against CV3 so could not see whether the bean form of the cowpea virus is more closely related serologically to CV4 than it is to TMV. If you have any CV4 perhaps you could send me a little and I would test it against my amtisera to the bean and tobacco forms of the cowpea virus.

There has been nothing published about chemical differences between these two forms but there is a good deal known. The bean form, for instance, contains histidine, and the tobacco form does not, but I have not got full details of all the differences that have been found. Markham got amino acid analyses done on the two forms, I think by M. W. Rees of the Biochemical Laboratory in Cambridge. I gather he has no intention of publishing, but it would probably be worth your while to write to him and find exactly what his results were. I have been intending to do this for some time, but have never got around to it, so I shall be glad also to know what the results are. You might say you are writing at my suggestion and that any information would be welcome to both of us.

With kind regards,

Yours sincerely,

(F. C. Bawden

Dr. Rosalind Franklin,
Birkbeck College Crystallography Laboratory,
21 Torrington Square, W.C.1.